

An Evaluation of Public Transport Service and Performance (Express Bus) at Changlun, Kedah, Malaysia

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ABSTRACT

Public transport is a transport device for transporting people and goods. Therefore, public transport must comply with several characteristics such as having a great time, high frequency, convenient, cheap, fast, safe, etc. The paper is an overview of the respondent perception of express bus services. The survey aimed to getting feedback on consumer perception and satisfaction on the express bus transport services, and able to identify factors improvements in terms of management and enforcement. The study was conducted by distributing questionnaires to users of bus services and interviews the bus driver and expresses bus operators. Data were analyzed descriptively to find the frequency, percent and mean using SPSS. Average Index Method also using to get customer satisfaction index based on data obtained from the questionnaire. Based on the results, respondent had positive perceptions of all research objectives especially improvement factors in term of management and enforcement. Some suggestions are made based on this study to improve the quality of express bus service.

Keywords

Public transport, perception, satisfaction level, improvement, services.

1.0 INTRODUCTION

Transportation plays an important role in human society since time immemorial for the purpose for living, transporting goods and facilitates the movement of people from one place to another place. Transportation is also an alternative in a communications system in the world. It is considered as the driving force and income for some people. Development of an area closely related to the transport system. If the transport system is not emphasized, then the area is difficult to develop.

In Malaysia, the public transport network is the most significant in either communications system for urban or rural communities. According by White (2002), the public transportation is all modes of transport provided by government to the people move such as buses, train, LRT and others. Meanwhile, according by Creswell (1976), public transport as one of the leading passenger transport and it is for everyone. The public transportation can also be defined as a form of transport that has an enormous capacity to carry passengers at a time, as opposed to private vehicles with small capacity. As a country development, communication system in a State should have the competence and advancement of technology and services used.

Change for the sake of change has taken place in accordance with the times and time, of which transport and traffic patterns change constantly. Mini bus service has been turned into Intra-city, trains move to the commuter train, monorail and LRT¹. Public transport is said to be one of the alternatives to assist and relieve the traffic congestion, especially in urban areas. Therefore, the use of this service should be improved to help reduce traffic congestion and road accidents.

1.1 Background issues

Transport refers to a vehicle carrying someone or something from one place to another to another and usually it leads to the distance than if on foot. Transport aims to facilitate community communication system either in the village or town. While most people have their own vehicles, public transport is still the preferred choice for those on low incomes. Every year there are a lot of complaints from those who expressed dissatisfaction towards the service and management of public transport in Malaysia.

¹ LRT – Light Rail Transit

The safety factor is a major problem faced by the users of public transport as there are a handful of not particularly polite bus drivers while driving. Community was often complaint about the avarice bus drivers on the road every time especially during the festival seasons such as New Year and Hari Raya. The issue of accidents and deaths on the road often adorn the newspaper and also dealt with through electronic media.

In fact, there are a select few companies are taking the opportunity to profiteer by raising fares when the festival season or school holidays. The relatively expensive cost of fares is often said by people, especially the fares for taxis and LRT. Then, the bus fares will also rise dramatically as during the festival seasons or school holidays. There are a handful of express bus operators to raise their fares more than 40% of the reason oil prices. Burdensome action had to buy a ticket because they had no other choice. In Mingguan Malaysia also understand there are some passengers who buy a ticket for one way travel from Johor Bharu to Kuala Lumpur is at RM60 compared with RM30 normal rate. For consumers who make the bus as the main transportation, they have no other choice but to buy a ticket at the price offered.

Besides that, the users are also often faced with the problem of accuracy of management time to reach the destination. In most cases such as Puduraya Terminal, bus delays often caused by traffic jams leading to the stop or interruption in transit. According by Tan Sri Aceh Che Mad (Straits Times, 27 August 2012)², he said the problem of congestion due to the increased number of vehicles entering the administrative center of the country during peak hours, which reached 28881 vehicles within about an hour. This is due to the attitude of the society who liked to drive their own although there was numerous public transport facilities provided by government. This situation occurs in the country, especially in the city of Kuala Lumpur as a confluence of factors such as the absence of an efficient system of communication between the different types of public transporting, travel slow due to congestion and so on.

1.3 Problem Statement

The issues related to public transport services are not a new thing. Each year, the government made a statement to improve and enhance the quality of public transport. But year after year, the issue remains to be seen whether the government is serious in

addressing the problem, or it is an issue which has no solution. The efficiency of the management of this bus service implemented to ensure the welfare and safety of consumers. The focus of the study is on the express bus transport service; long distance bus, where users often encounter problems such as security and management. This is because there are few drivers being careless and not thinking about safety of consumers. In fact, there are a select few companies are taking the opportunity to profiteer by raising fares when the festival season or school holidays. Besides that, the users are also often faced with the problem of accuracy of management time to reach the destination. Therefore, the researchers want to make a review of the public transport in Malaysia specifically for express bus transportation with a focus on customer perception, satisfaction level and the improvement factors in the management and enforcement.

1.4 Objective

- I - To identify the consumer perceptions of the express bus service
- II - To identify the satisfaction level of the express bus service
- III - To identify the improvement factor in term of management and enforcement

1.5 Research Question

- I - What are the consumer perceptions of the express bus service?
- II - What is the satisfaction level of the express bus service?
- III - What the improvement factor in term of management and enforcement?

1.6 Scope

The study was conducted on consumers who use the express bus service. The study was conducted at Changlun, Kedah, Malaysia. The scope of this study is to examine how users of public transport services in Malaysia of express bus transportation in particular by focusing on the perception, satisfaction level and the improvement factor in term of management and enforcement.

² <http://www.sinarharian.com.my/edisi/selangor-kl>

2.0 LITERATURE REVIEW

Transportation is a key element to connect the area with other areas. It is also the heart of the lives of the people especially in the rural and urban areas. Without a planned transportation system, movement activities and human interaction from one area to the other will be affected. The transport system in general there are two types of facilities and services that are used for the movement of people and goods such as private vehicle and public transportation.

2.1 History of Public Transport

2.1.1 Definition

Public transport (North American English: public transportation or public transit) is a shared passenger transportation service which is available for use by the general public, as distinct from modes such as taxicab, carpooling or hired buses which are not shared by strangers without private arrangement. Public transport between cities is dominated by airlines, coaches, and intercity rail. High-speed rail networks are being developed in many parts of the world. Most public transport runs to a scheduled timetable with the most frequent services running to headway.

2.1.2 Type of public transport

There are several types of public transport:

- a) Bus
- b) Train
- c) Tram
- d) Rapid transit

2.2 The Component in Public Transport

Transit system is a transport system that has been set and itinerary as the public bus services. There are the components in public transport system such as:

- a) Station
- b) Terminal
- c) Bus stop
- d) Depot
- e) Route
- f) Headway
- g) Fleet Size

2.3 Function of Public Transport

- i Reduce traffic congestion

- ii Good public transport system can generate economic development
- iii To minimize air pollution

2.4 Legislation

- 2.4.1 Road transport Act 1987 (Act 333)
- 2.4.2 Commercial Vehicles Licensing Board Act 1987
- 2.4.3 Code of Practice for the Safety, Health and Environment (SHE)
- 2.4.4 Standard Operating Procedures;
 - a) Management drivers
 - b) Vehicles management

3.0 METHODOLOGY

3.1 Sample Size

The scope is more focused on the express bus service users in Changlun, Kedah with total respondents of 100 people based on the three difference race such as Malays, Chinese and Indians from the actual population in Kedah based on the theory of Krejcie and Morgan (1970).

3.2 Data Collection

- a) Primary source (interview, observation etc.)
- b) Secondary source (journal, book etc.)

3.3 Method of Study

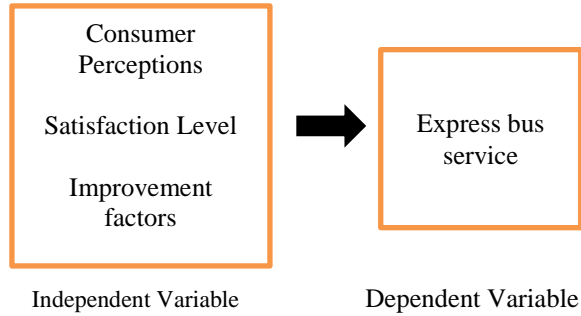
Methodology of the study will be divided into several stages in order to obtain the information. At the initial stage, a working structure designed to get an overview of the course of the study. This structure will divide the study into several parts, namely:

- a) written information
- b) Information from interview
- c) Information from questionnaire

3.4 Analysis Data

The data collected and received from the respondents through a questionnaire will be reviewed and compiled using SPSS accordance with the objectives and scope of the study. Descriptive analysis method is used to get the value of reliability, frequency, percentage and mean. For the analysis, interpretation and findings consistent with the objectives of the study, the facts obtained are presented in order of priority.

3.5 Theoretical Framework



3.6 Average Index

Equation as below shows the average index method introduced by Abdul Mohsen Al Hammad.et.al (1996). This method is used to get customer satisfaction index based on data obtained from questionnaire.

$$\text{Average index} = \frac{\sum a_i x_i}{\sum x_i}$$

$$\text{Severity index} = \frac{\sum a_i x_i \times 100\%}{\sum x_i}$$

Where a_i = constant which symbolizes the weight of i , x_i = frequency of respondents symbolize variables for $i = 0, 1, 2, 3, 4, 5$ and described as follows: x_1 = frequency of responses for "strongly disagree" and in line with $a_1 = 1$, x_2 = frequency responses of "do not agree" and in line with $a_2 = 2$, x_3 = frequency of responses for "not sure" and in line with $a_3 = 3$, x_4 = frequency responses of "agree" and in line with $a_4 = 4$, x_5 = frequency of responses for "strongly agree" and in line with $a_5 = 5$.

Table 3.1 shows the category scale used (M. Z. Abd. Majid and McCaffer, 1997);

5- Totally agree	$4.50 \leq AI \leq 5.00$
4- Agree	$3.50 \leq AI < 4.50$
3- Moderate	$2.50 \leq AI < 3.50$
2- Disagree	$1.50 \leq AI < 2.50$
1-Totally disagree	$0.0 \leq AI < 1.50$

Table 3.1 Scale Category

3.7 The Level of Implementation Work

Broadly speaking, the framework are done according to the following the level;

- Problems of the study area.
- Identify the goals and objectives of the study.
- To carry out research and data collection.
- Analyses of evaluating and reshaping the route based on the research and data.
- Summarize data.
- Preparation and proposal selection.
- Submit a proposal of implementation or final decision

4.0 FINDINGS

Based on the results, 54% of respondents were males while the rest are females (46%). The mean, median and standard deviation of gender is 1.4600, 1.0000 and 0.50091. In term of age, the use of express buses highest for ages 20 -30 years. This scenario is due to transport comprises the majority of users in adults. This is because most of the users use the service to travel in a foreign country with the purpose of work, continues to their study and so on. Mean of the age is 2.3100. Besides that, the race of Malay is the highest to use the express bus service at 66% and the mean of race is 1.4600. While, the frequency of <2 times (46%) is the highest respondent used the express bus in a year.

4.1 Customer Perception

Figure 4.1 shows the mean of all items in customer perception. The item refer a_1 (use the express bus is safe), a_2 (express bus service is convenient), a_3 (comfortable using the express bus), a_4 (time departure & arrival) and a_5 (express bus fare is cheap). The mean value for item a_2 (express bus service is convenient) is the highest of 3.9200. The reliability for all items in the consumer perceptions is 0.9333. The figure 4.2 shows the average index for all items in the consumer perception of the express bus service. Items for using express buses are safe, comfortable express bus service and comfort are using express buses are on status agree with the average value of the index 3.9, 3.92 and 3.58. Next, the average value of an index of departure and arrival time item is low of 2.88 and is at moderate status.

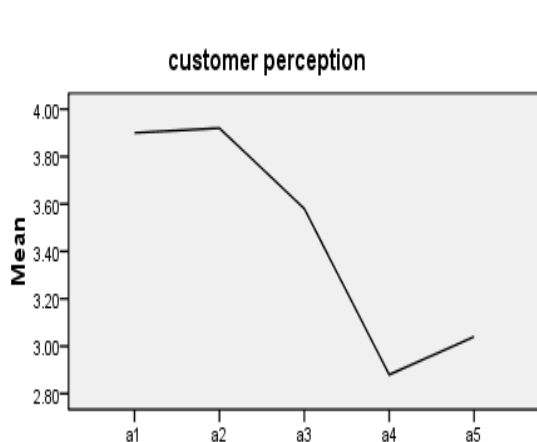


Figure 4.1: The mean of all items in customer perception

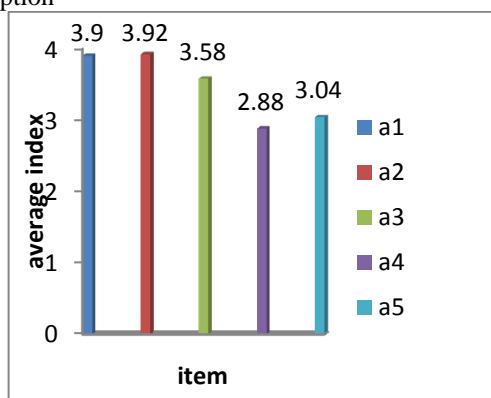


Figure 4.2: An average index of all items in customer perception

4.2 Satisfaction Level

Figure 4.3 shows the mean for all items in the level of user satisfaction. The mean for item b3 (ticket price rises when the festive season) is the highest of 4.5800 while the item for b5 (tour bus driver) had the lowest mean value of 3.3400. The reliability for all items in the satisfaction level is 0.908. Next, the average index of the item b3 (ticket prices go up when the holiday season) is the highest of 4.58 and are in status strongly agree. It can be clearly seen in figure 4.4 below.

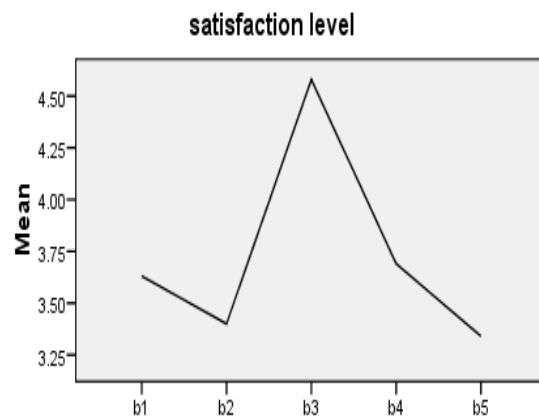


Figure 4.3: The mean of all items in satisfaction level

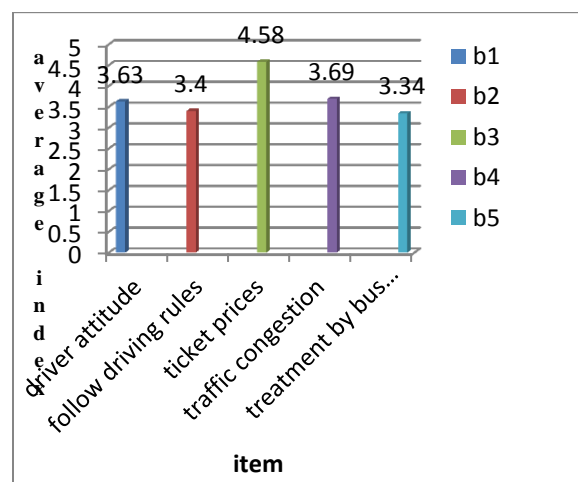


Figure 4.4: An average index of all items in satisfaction level

4.3 The Improvement Factor in Term of Management and Enforcement

The reliability for all items in the improvement factor is 0.778. Based on the figure graph 4.5, found the mean for c1 (good condition before the bus was traveling) was the lowest of 4.3500 and the mean highest c3 is 5.0000. Next, in terms of average index, c3 have the highest average value of 5. It is found that users strongly agreed with a fine to the operator and the driver of the bus company be fined if an accident involving death. Clear picture of the average index can be seen in figure 4.6.

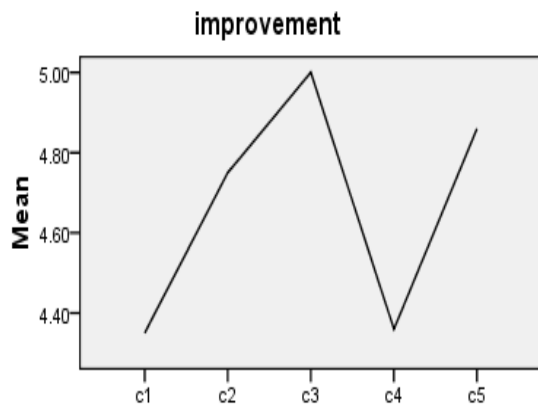


Figure 4.5: The mean of all items in the improvement factor

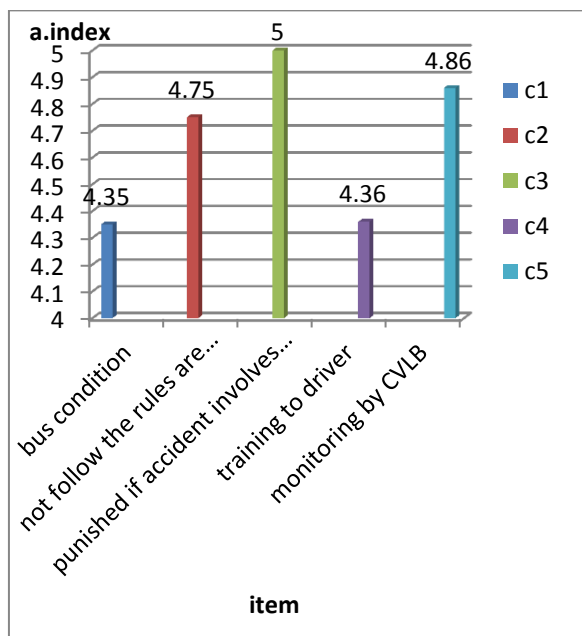


Figure 4.6: An average index of all items in the improvement factor

5.0 DISCUSSION

The issue discussed in this study is about the level of consumer perception on express buses. Public transportation (express bus) is one source of economic development in our country. All services are provided in accordance with its own methods of operation, usually each service also intertwined with each other.

5.1 Customer Perception of the Express Bus Service

Consumer perception has been selected as the research scope. Increasing of express bus demand has been evaluated in this. The consumer perception is important in the effectiveness of existing operations. Based on the results of the analysis performed, the user gives an item agree to use the express bus is safe, existing bus services and the convenience of using the express bus. While consumers also say that they were less satisfied with the express buses depart and arrive on time. Inaccuracies result in passenger waiting time is long and slow to catch up on the destination. Therefore, the parties involved must play a role to improve the government need to realize that encourage Malaysians to use public transport.

5.2 Satisfaction Level of the Express Bus Service

Through information from users' satisfaction on the express bus, found users very unhappy with the bus ticket price increases when the festive seasons like school holidays and feast. This is due to the attitude of the operators or sellers who like to take advantage of the weakness of others. For users who use the express bus as an alternative of their relationship, they had to buy tickets even if the price is expensive. Besides that, there are some users less satisfied with the service bus drivers. Consequently, the responsible party must play a role in enhancing the level of express buses.

5.3 Improvement Factor in Term of Management and Enforcement

From the data obtained, the users totally agree with the sentence imposed on the operators of the company and the bus driver, if the accident involves death. A punishment for alerting operators and bus drivers to follow the rules also has been set. If bus drivers to follow the rules set, the problem killing passengers will not happen. Consumers also urged the Commercial Vehicle Licensing Board (CVLB) the monitoring of the promoters and ticket sellers to ticket prices will not be raised prices of the festival season. If monitoring is not made by the CVLB, operators will take advantage of the express bus users.

6.0 RECOMMENDATIONS AND CONCLUSION

Several suggestions had been made to improve the quality of express bus service, which are:

6.1 The Enforcement Agencies

The enforcement agencies such as PWD³, SPAD⁴, and RTD⁵ play important roles in road safety. The parties also need to make improvements in securing the safety and satisfaction of public transport especially express buses. The charge also should tighten security laws in the way that the road accident rate can be reduced. In addition, the authorities need to do a reassessment on the promoters either in accordance with the safety standards set by the government or not. The parties also need to increase the campaign on road safety to road users either through mass media or electronically. The CVLB also be the monitoring of the promoters to reduce the problem of rising ticket prices when festival season.

6.2 Express Bus Company Operators

Someone entrepreneurs who want to set up a transport company must comply with the regulations laid down for dealing with problems as they arise. Promoters also need to plan for the safety of the user to ensure the safety and security of user satisfaction is increased. Operators also need to make sure and remind their employees to check the condition of the bus before starting the journey. Operators should provide training and courses for drivers to drive according to prescribed standards to reduce the problem of traffic congestion and road accidents.

6.3 The Users

The users need to make a complaint to the authorities when they find entrepreneurs raise ticket prices and the driver did not follow the standards set by the government while driving. Users also need to use the facilities provided in the best possible order to avoid any damage.

In conclusion, public transportation (express bus) is very important for users to move to a place quite far distance. Therefore, security laws should be tightened to overcome road accidents. In addition, promoters have to play the role of a good provider of services to the users so that more and more consumers using next bus and traffic congestion can be reduced.

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³ PWD – Public Work Department

⁴ SPAD – Land Public Transport Commission

⁵ RTD – Road Transport Department